

granular Manganese (IV)-containing compositions, selected from the group consisting of glauconite, manganese greensand and pyrolusite] comprising a granular source of Manganese (IV) wherein said Manganese (IV) serves as an electron acceptor for manganese-reducing bacteria or other anaerobic bacteria.

Claim 49, rewrite as Claim 49 (amended) as follows:

A solid-chemical composition in accordance with Claim 48 [wherein the Manganese (IV) contained in said granular composition acts as an electron acceptor for manganese-reducing bacteria and/or other MRP anaerobic bacteria], whereby said granular source of Manganese (IV) is one or more selected from the group consisting of glauconite, manganese greensand and pyrolusite.

Claim 50, rewrite as Claim 50 (amended) as follows:

A method for anaerobic bioremediation whereby a solid-chemical composition in accordance with Claim [49 wherein the composition is used as a component in] 48 is applied to contaminated geologic media within a remediation trench, slurry-wall, semi-permeable barrier, [as a well-packing material in a screened well, or other subsurface remedial application] or well-packing material.

Claim 51, rewrite as Claim 51 (amended) as follows:

A solid-chemical composition for anaerobic biodegradation, detoxification, and transformation of toxic organic and inorganic compounds in contaminated geologic media, [comprised in whole or in part with minerals